PETERS CREEK PLACER PROJECT Cariboo Mining Division British Columbia

NTS 93N/4 Latitude 53° 01' North Longitude 121' 47' West

Prepared for

Rich Coast Sulphur Ltd.

Prepared by

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1.0 SUMMARY

Canadian Gravity Recovery Inc. was contracted by Rich Coast Sulphur Ltd. to supervise, in cooperation with Rich Coast's field management, a bulk sampling program that took place between September and December 1968. This report reviews all historic records in conjunction with 1988 sampling results to determine the possible placer gold reserve base for Peters Creek.

The 1988 bulk sampling program included detailed sampling at four locations over 5525 meters (18,126 feet) length of Peters Creek. All data clearly indicates that there are two primary stratum of gravel; surficial post-glacial gravels with insignificant gold values overlying apparent interglacial gravels that are gold bearing. These stratigraphies are consistent throughout the length of Peters Creek with only the thickness of each stratum varying over distance.

Sufficient sampling in 1988 supported by historic data permits classifying the gold bearing gravels into a possible category. Possible reserves delineated in Peters Creek are estimated at 959,000 cubic yards grading .013 fine ounces gold per cubic yard or 12,250 fine ounces gold. The stripping ratio of waste gravels to paygravels is 1.6:1. There is good upside potential to increase this reserves base.

It is recommended that a final phase of exploration be conducted on Peters Creek on areas that are deficient in data, primarily between the Ventures shaft and Campbell Creek. This area will require the construction of a road to conduct a similar exploration program as implemented in 1988. The program will include preparing a preliminary mine and environmental study report to be submitted to the government in anticipation of permitting for full scale mining. The program is estimated to cost \$350,000.

2.0 CONCLUSIONS

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The 1988 sampling program was successful in delineating possible reserves of 959,000 cubic yards grading .013 fine ounces per cubic yard for a potential gold reserve base of 12,250 fine ounces. It appears the surface post glacial gravels do not host economic values of gold, therefore will have to be removed prior to mining. Assuming the above holds the stripping ratio would be 1.6 : 1. The gold bearing gravels are interglacial in nature with even gold distribution throughout a 5 ± 7 meter section with the exception of an enriched zone just above bedrock. The 1988 sampling program did not differentiate this enriched zone and therefore provides good upside potential to the overall grade.

There is good potential to expand the reserve base within Peters Creek by conducting exploration in the following areas:

- 1) Upper reaches of Peters Creek above Bassford Creek.
- 2) Lower reaches of Bassford, Campbell and Carruthers Creeks, tributaries to Peters Creek.
- 3) Downstream of the old dragline workings.

3.0 RECOMMENDATIONS

Based on the positive results from the 1988 sampling program it is strongly recommended that a final stage exploration program be implemented on Peters Creek. The objectives of this program would be:

to continue the bulk sampling in areas that are deficient in data, primarily upstream of Ventures Shaft to Bassford Creek.

establish the efficiency of the bulk sampling plant, thus potentially upgrading the grade of gravels, and

3) submit a preliminary mine and environmental report to the Ministries of Energy, Mines, & Petroleum Resources; Environment and Fisheries & Oceans.

The recommended program will be consistent with that conducted in 1988 with the exception of collecting a higher percentage of confirmation samples and attempting to test the efficiency of the bulk sampling plant.

The exploration program will comprise of excavating and processing gravel material from six locations. (Refer to Figure 2 for locations) Three proposed test pit locations (89-01/02/03) between Ventures Shaft and Campbell Creek will require road access construction. The estimated costs to implement the final stage of exploration on Peters Creek are outlined below:

Road Construction

Rough-in: D9G Dozer 100 hrs @ \$175/hr Haul Material: Euclid Truck, 100 hrs \$70/hr Load Material: Excavator (225 or equiv.)	\$ 17,500 7,000
70 hrs @ \$100/hr Clean-up: D7 Dozer, 55 hrs @ \$100/hr	7,000 5,500
	37,000

Sample Site Preparation

(inclusive of logging, stripping area, construction of settling ponds, set up plant/pump etc.)

Logging Preparation	2,000
D9G Dozer	3,150
D7 Dozer 20 hrs @ \$100/hr	2,000
Excavator (225) 15 hrs @ \$100/hr	1,500
Labour 4 man days @ \$140/day	560
	9,210
Assume six locations	55,260

Sampling Processing/Clean-Up/Engineering

Excavation (235 or larger) 50 hrs @ \$140/hr Excavation (225 or equiv) 50 hrs @ \$100/hr D7 Dozer 50 hrs @ \$100/hr Bulk Sampling Plant/Pump/Pipe	7,000 5,000 5,000
5 days @ \$500/day Flytt Pump & Generator Clean-up, Confirmation sampling,	2,500 1,000
Efficiency Testing	2,500
	23,000
Assume six locations	138,000
Rehabilitation D9G 100 hrs @ \$140/hr	14,000
Mobilization And Demobilization To/from Peters Creek and from site to site	12,000
Support Equipment & Camp Costs	28,000
Engineering Support & Studies Including: - government applications/permitting - quality control of sampling program - surveying & mapping - field supervision - final exploration report, preliminary mine and environmental study report	
- administration	40,000
Total	324,260
Total Inclusive of Contingencies	\$350,000

4.0 PROPERTY DESCRIPTION

4.1 Location

The Peters Creek placer project is located 60 kilometers east of Quesnel, British Columbia, and is situated within NTS Mapsheet 93N/4 in the Cariboo Mining Division, at latitude 53 01' North and longitude 121 47' West (Figure 1). Peters Creek is a major tributary to Lightning Creek with the confluence of the two creeks being 55 kilometers east of Quesnel.

4.2 Access

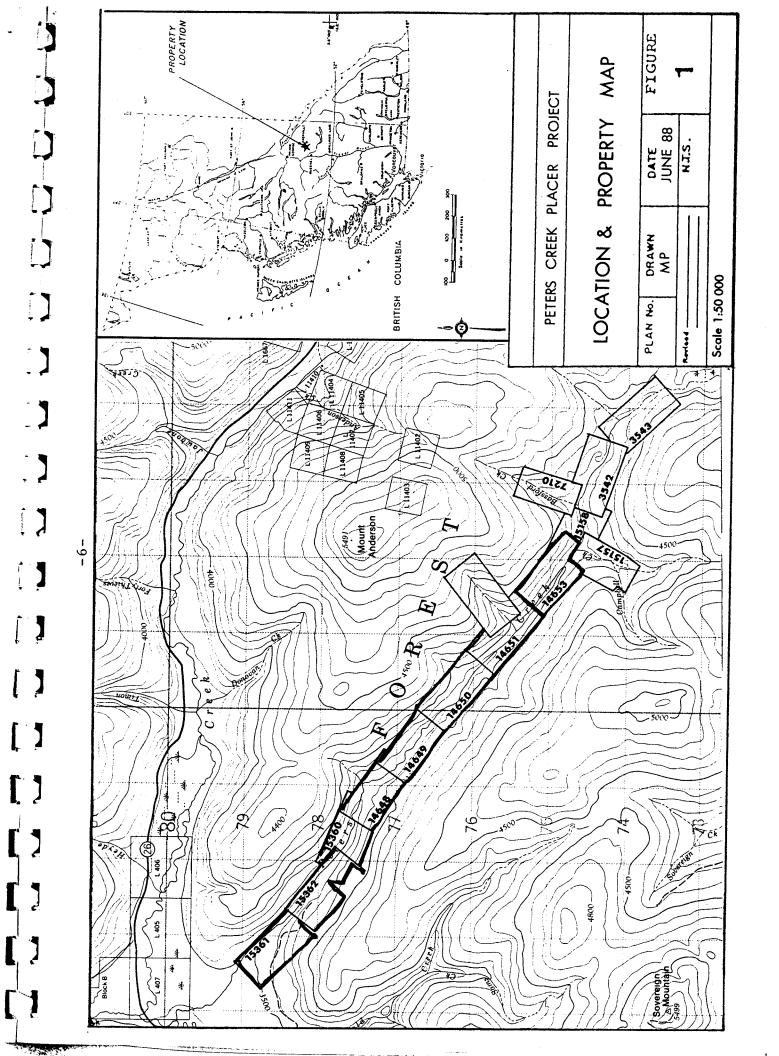
Peters Creek is readily accessible from Quesnel, British Columbia via highway 26, a paved government road providing access to the Wells area. At the 53 kilometer mark, 5 kilometers past the Troll Ski Hill, a good gravel forestry road provides access to various locations along Peters Creek. The lower 6 kilometers of Peters Creek above Peters Creek bridge can be accessed with a four wheeled drive vehicle along a tote road that parallels Peters Creek to the Mathers Creek tributary. Access to the upper reaches is from the main forestry road which parallels the northern slopes of Peters Creek up to Bassford Creek. Exploration within the upper reaches of Peters Creek, either upstream or downstream of Bassford Creek, must be facilitated with new tote road construction. Due to unstable ground conditions in these areas it is probable that only track mounted or large rubber tired machinery will be able to work these areas.

4.3 Specific Land Data

The Peters Creek placer project is a consolidation of thirteen (13) placer leases owned by two parties. The property is situated on mapsheet NTS 93N/4, and is in the Cariboo Mining Division. A summary of the individual placer leases is outlined below and illustrated on Figure I.

Rich Coast Sulphur Ltd. has entered into an agreement with Vic Guinet and the partnership of Vic Guinet and Bill Dyson to explore, develop and mine the property.

Lease Number	Registered Owner	Expiry Date	Grouping #
PL 14648	Vic Guinet	June 1, 1989	N/A
PL 14649	Vic Guinet	June 1, 1989	N/A
PL 14650	Vic Guinet	June 1, 1989	N/A
PL 14651	Vic Guinet	June 1, 1989	N/A
PL 14653	Vic Guinet	June 1, 1989	N/A
PL 15360	Vic Guinet	June 1, 1989	N/A
PL 15361	Vic Guinet	June 1, 1989	N/A
PL 15362	Vic Guinet	June 1, 1989	N/A
PL 15158	V.Guinet&B.Dyson(50/50)	July 15, 1989	966
PL 15157	V.Guinet&B.Dyson(50/50)	July 15, 1989	966
PLM 7210	V.Guinet&B.Dyson(50/50)	July 15, 1989	966
PL 3542	V.Guinet&B.Dyson(50/50)	July 15, 1989	966
PL 3543	V.Guinet&B.Dyson(50/50)	July 15, 1989	966



4.4 General Geographic Setting And Climate

Peters Creek represents one of the larger tributaries flowing into Lightning Creek and has a drainage basin of approximately 36 square kilometers. The prominent drainage of Peters Creek is to the northwest while the average gradient is 3%. The estimated mean flow for the Peters Creek drainage basin is 13 c.f.s.

Peters Creek is well defined by both moderately sloping northern and southern limits and has an average valley width of 65 meters. The area is heavily timbered with fir and spruce and has been actively logged by Weldwood of Canada over the past five years.

The nearest weather station to Peters Creek is Barkerville located approximately 20 kilometers to the east. The following weather statistics are from Atmospheric Environment Services provide the mean statistical summaries for the years 1951 to 1981.

Annual Rainfall (excludes snow equivalent) for the months of:	505.7 mm
June	88.5 mm
July	81.6 mm
August	102.2 mm
September	81.4 mm
Annual Snowfall	538.4 mm
Annual Precipitation	1,043.9 mm
Daily Temperatures (Max/Min) for the months of:	7.1 C to -4.3 C
June	16.0 C to 3.1 C
July	19.0 C to 5.2 C
August	18.1 C to 5.0 C
September	13.9 C to 1.6 C

The above conditions would facilitate a mining operation working the season between April and November of each year (240 days).

4.5 Property History

Peters Creek history is well documented in Geological Survey Memoir 149, by W.A. Johnston and W.C. Uglow (pg. 177-81) and in engineering reports by George C. Hogg (1922), W.M. Throne (1924) and Grenville Collins (1951). The following is a summary of Peters Creek mining history.

Late 1870's:

Ground sluicing of shallow gravels on upper reaches of Peters Creek with subsequent drifting on deep channel gravels of Peters Creek at two locations known as Mather and Ventures Shafts.

1905 - 1907:

Premier and White Star companies under management of J.G. Mathers reopen Mathers Shaft, equip shaft with a water wheel and 6 1/2 inch Cornish pump and completed 300 feet of drifting. No further work after 1907.

1908 - 1911:

Mining work carried out on Ventures Shaft, good gold values recovered, however, experienced trouble with excess water seeping into the workings.

1921:

Construction Mining Company, again, reopened the mine and drifted a further 250 feet. Gold values reported as high as 6 1/2 ounces to a set of 6 feet were obtained.

1922:

Ongoing numerous hand workings in upper reaches of Peters Creek and tributaries with nuggets as large as 5 ounces reported.

G.C. Hogg examined Peters Creek from its mouth to Campbell Creek, a tributary to Peters Creek and estimated reserves of over three million cubic yards of gravel averaging .025 ounces gold per cubic yard.

1924:

W.M. Throne for Kafue Copper Development Company, drilled 36 holes on the property and determined that one million cubic yards of gravel grading .015 ounces per cubic yard existed in the middle section of Peters Creek between Mathers Shaft and Ventures Shaft.

1945 - 1950:

Under the supervision of Grenville Collins, 7 lines of drill holes were drilled to bedrock. The program outlined a deep channel averaging 100 feet wide, 40 feet deep and 5 miles long which is amenable to dredging techniques. Mr. Collins estimated reserves to be approximately four million cubic yards grading .014 cunces per cubic yard for the entire length of Peters Creek.

1960's:

Dragline operation successfully operated lower reaches of Peters Creek, above Mathers Shaft, however, stuffage material from the side slopes and poor equipment personnel shut the operation down.

5.0 ALLUVIAL GEOLOGY

Initial information regarding the alluvial geology of Peters Creek is from the interpretation of old drill hole data and personal communication with Mr. Victor Guinet. In the lower 3 kilometers of Peters Creek, below Mathers Shaft,up to 38 meters of glacial and post glacial material overlie bedrock. The upper 21 meters predominantly consists of slum, a water saturated silt, interbedded with sand to fine gravels. This section overlies 12 meters of glacial boulder clay and 5 meters of fine gravels.

In the middle section of Peters Creek between Mathers Shaft and Ventures Shaft the ground is considerably shallower and a continuous gold bearing channel has been outlined by drilling.

This years sampling program clearly defines a post glacial silty sand and pebble-cobble gravel unit six to eight meters thick overlying a one meter thick layer of clay which overlies a four to seven meter sequence of apparent interglacial pebble-boulder gravels. The lower interglacial gravels are goldbearing and also host significant concentrations of black sand. The unit is tightly compacted in a silt to sand matrix and comprise of clasts whose lithologies appear to represent the local geology being quartzite, graphitic phyllite, schist, limestone and quartz.

6.0 1988 SAMPLING PROGRAM

During September to December, Rich Coast Sulphur conducted a bulk sampling program at four different locations on Peters Creek. sampling program, under the supervision of Canadian Gravity Recovery Inc. included the excavation and processing of representative bulk samples from surface to bedrock. At most sample locations smaller confirmation samples were collected and processed by Canadian Gravity Recovery Inc. The primary purpose of the confirmation samples was to validate the gold values and recovery efficiency of Rich processing plant. The following section details the excavation procedures, reduction sample procedures. and the results interpretations. All results are recorded in the standard units to be consistent with those units used throughout the placer industry.

6.1 Test Pit Excavation Procedures

Due to difficult ground conditions being; water saturated gravels from surface to bedrock and the depth to bedrock greater than 10 meters, large excavating and dewatering equipment was required to complete the excavation of samples. The main pieces of equipment utilized to implement the program included:

Case Drott 3-4 cu.yd excavator Caterpillar 225 1 cu.yd excavator Caterpillar D9G dozer Caterpillar D7 dozer 6" Flytt pump & generator set Euclid 20 ton rock truck Bulk sample locations 01, 02 and 03 ranged in depth to bedrock from 10.1 to 13.7 meters (33 to 45 feet) to bedrock. To collect a dry representative bulk sample from various intervals the test pit had to be staged down and dewatered simultaneously. This was achieved by excavating the pit to a minimum of two bucket widths, thus one excavation from one bucket width would act as a sump, while material from the other side was used for testing purposes and then alternated. This procedure would continue until the desired sample interval (in vertical profile and volume) had been excavated and stockpiled for processing. The balance of material not required for processing (waste) was stockpiled and stacked with the use of the D9G dozer away from the sampling operation. (Refer to Figure 2).

The above procedure was successfully developed and implemented after Bulk Sample 01, which encountered difficulties due to insufficient initial site preparation.

Initially, the sample pit area was cleared of brush and trees, with surface top soil and gravels stripped and stockpiled for rehabilitation purposes. The first sample intervals down to a depth of 7-8 meters (21-25 feet) were excavated with the Drott and stockpiled in reach of the CAT 225 excavator which in turn fed the processing plant or the Euclid truck if the plant was not near, as in Bulk Sample 03. Once this task was completed the D9G excavated a bench down to the 4-5 meter (12-16 feet) level thus providing a staging area for the Drott to complete the excavation to bedrock.

Upon the completion of each bulk sample a smaller 0.10 cubic meter (0.25 cubic yard) sized confirmation sample was also collected from the sample interval. This sample was either collected by hand shovelling a representative channel sample from the prescribed interval or scrapping the inside edge of the test pit with the excavator bucket. The resulting sample was then placed into 5 gallon plastic containers.

After the completion of the bulk sample the excavation sight, settling ponds and tailings were backfilled and the surface topography contoured to its original shape.

6.2 Test Pit Reduction Procedures

The bulk samples, which ranged in size from 36-292 bank cubic meters [b.c.m.] (47-384 bank cubic yards [b.c.y.]) and average 101 b.c.m. (133 b.c.y.), were processed in a simple wash plant. The wash plant consists of a wet grizzly with 6 inch undersize material being gravity fed to a vibrating, wet, double deck screen. The double deck screen reduction produces a minus 3/8 inch feed to the sluice boxes. These consist of two sluice runs (upper 6' x 8', lower 8' x 8') which gravity feed into one another and flowing in opposite directions. For this particular program only the upper sluice run was lined with short fibre astroturf and 1 1/2 inch expanded metal. At the end of the lower sluice run is a boil box (nugget box). After the completion of each sample interval, the upper sluice run and boil box were cleaned up resulting in four to five gallon buckets of concentrates.

Bulk sample concentrates and confirmation samples were transported to CGR's mobile test plant which at the time was located near Likely, B.C.. C.G.R. processed the material in the following fashion:

The sample material was pre-washed and fed into a 5 foot by 24 inch trommel. The entire length of the trommel consists of 3/8 inch tapered punch plate. Oversize material, after thorough cleaning in the trommel, was discarded. Undersize was gravity fed to a Syntron screening unit equipped with spray bars. From here, the minus 3/8 inch - +12 mesh fraction was gravity fed to a YT-12 pulsating jig. Jig feed was controlled to ensure a uniform flow of material across the bed. Upon completion of a sample run, the first four jig baskets were cleaned as were the jig hutches (minus 8 mesh material). The jig basket material was panned, whereas the jig hutch material was hand fed onto the Gemenitable for separation.

The minus 12 mesh material from the Syntron screen was gravity fed into a 1 1/2" SALA pump which carried this fraction in a 40% slurry to the top of a Humphreys cyclone. This cyclone dewaters the slurry and the material is gravity fed to a single start Reichert Mark VII spiral. Concentrates from the spiral flow directly onto a Gemeni table, spiral middlings are recirculated, and the tailings are directed back through the jig circuit.

The head tank, which provides water to the table, negates pressure fluctuations and allows optimum table efficiency. The free gold and table concentrate splits were bagged separately from the table middlings. All gold recovered in the table splits was amalgamated with triple distilled mercury which was tested for purity prior to amalgamation. Digestion procedures followed standardized guidelines accepted throughout the industry.

During this test program, every effort was made to ensure that gold loss through the CGR system was minimized. These steps included:

1. thorough cleaning and flushing of all parts within the system after every run;

periodic panning of jig tailings;

periodic panning and/or tabling of spiral tailings;

4. periodic panning and re-tabling of table middlings and tailings.

Gold loss was negligible in every check by panning or re-tabling of material exiting the system.

All the gold recovered from amalgamation and panning was weighed on a Mettler AE 163 electronic scale, accurate to 0.01 milligrams, screen analysis were also performed on several samples and results are recorded in Tables 1 and 2.

To determine gold values per cubic yard careful control was kept to the number of excavation buckets fed to the plant for each sample. The excavator bucket was measured and volume calculated with the reduction

of loose yards to bank yards assumed with a 25% gravel expansion (swell) factor. The volume for the CAT 225 was estimated to be .60 bank cubic yards.

6.3 Interpretation of Results

An understanding of the surficial geology within Peters Creek is of importance as it serves as a subtle guideline to the cut off grade which would be encountered in a mining operation.

Several reports have suggested that the gravels overlying bedrock are pre-glacial in nature. By all accounts from this years exploration work there is little data to support this theory. The stratigraphy observed from the Ventures Shaft downstream to the old dragline workings is relatively consistent and broadly comprises of the following:

6-8 meters post-glacial, well stratified, silt/sand/pebble-cobble gravels.

1 meter clay.

± 1 meter inter-glacial boulder gravels.

4-7 meters moderately stratified inter-glacial gold bearing pebble-cobble gravels.

graphitic phyllite, quartzite bedrock.

It is now evident from historic drill records, bulk sampling and confirmation sampling that the post-glacial gravels host insignificant gold values ranging in grade from trace to .002 oz/b.c.y over the complete section. No detailed sampling was performed within the post-glacial stratum therefore, it is unknown whether there is a false bedrock gold enrichment above the impermeable clay horizon.

The underlying inter-glacial gravels are the most significant unit within Peters Creek and can be distinguished from overlying post-glacial by the following characteristics: 1) occurs below a clay horizon commonly associated with a thin layer of large boulders 0.5-2.0 m in size 2) the gravels are bound by a tighter matrix and 3) there is a slight increase in clast size.

The complete section of inter-glacial gravels is gold bearing with relatively consistent values occurring in the upper portions and more erratic values occurring just above and within the bedrock crevasses. The values within the upper portion of inter-glacial gravels from bulk sampling are; #01C = .009 oz/b.c.y., #02C - .008 oz/b.c.y., #03A - trace & #04 = did not distinguish, while values from confirmation samples indicate #01C = .008 oz/b.c.y., #02B = .010 oz/b.c.y., #03A = .008 oz/b.c.y. (Refer to Table 1)

The values within the lower portion of inter-glacial gravels appear to be more erratic as indicated from CGR's confirmation samples. The bulk samples did not indicate this erratic nature of gold values as the section intervals were generally greater than 3 meters. The values within the lower portion of inter-glacial gravels from bulk sampling are: #01D - 0.010 oz/b.c.y., #02(2) = .013 oz/b.c.y., #03B = .009 oz/b.c.y. and #04 = .024 oz/b.c.y.; while 'values from confirmation samples indicate: #02 = .005/.031/.002 oz/b.c.y., #03B = .015 oz/b.c.y., #04 = .037 oz/b.c.y. (Refer to Table 1)

Thus far it is evident that the gravels within Peters Creek can be clearly distinguished as surficial gravels hosting insignificant gold values and lower gravels above bedrock being gold bearing in economic portions. However, there is another trend within the lower inter-glacial gravels which has been observed and adds a significant impact to the properties value.

It appears that gold values and coarseness of gold increases in an upstream direction. This is evident both from G. Collins (1945) report on the churn drilling program and the recent bulk sampling program. (Refer to Table 3 for comparative results).

History	विकास विकास विकास	Politiky (1877) (1878)	in i. Nus		
Bulk Olf Bulk Olf Bulk Olf Bulk Olf	0 20 20 30 30 40 32 49 45	620 (23.0) 200 (20.0) 363 (216.0) 175 (05.0)	44.852 64.321 34.960	.0074 40001 .0012 .0012 .0095 .0085	
Bulk 016 : 36 CGR Conf 01A CGR Conf 01B CGR Conf 01C	silve i valka	395 lbs .1238; 408 lbs .1275; 440 lbs .1375	.004 .009 .038	0010ء (1000ء <u>۔</u>	8.49442 gm nugget & Percent
Bulk 02A Bulk 02B Bulk 02C Bulk 02C	0 10 10 21 21 30, 30 35	45 149 89.4 51 143 85.8	.875 5.582 40.276	.0003 .0003 .0021 .0019 .0088 .0079	
Pit #2 CGR Test 1 CGR Test 2	30 35 20 25	336 lbs .1050 648 lbs .2025	.017	.0142 .0128 .0052 .0047 .0114 .0103	
CGR Test 3 CGR Test 4	23 30 33 36	518 lbs .1619 552 lbs .1725 98 110.3	.173 .014 2.076	.0027 .0024	wt is 1 nugget
Bulk 03B CGR Conf 03A CGR Conf 03B	36 42 20 38 32 40	60 67.5 743 lbs .2322 724 lbs .2216	.060	.0101 .0091 .0084 .0075 .0164 .0148	
Bulk 04 CGR Conf 04	5 15 5 15	140 84.0 866 .2700	70.896	.0271 .0245 .0406 .0366	
Test Pit 05	15 25	981 .3066	.015	.0016 .0014	

^{* 1} b.c.y. = 3200 lbs Gold Fineness = 900

70.89563

10

TABLE 2 - GOLD SCREEN ANALYSIS

Project: 88-22

Sample: 88-22-010

Mesh Size (Tyler)	Weight (Grams)	Percentage by weight	Cum. Percent by weight	
+10	14.88545	23.14%	23.14%	
10 x 20	17.57981	27.33%	50.47%	
20 x 40	23.05551	35.84%	86.31%	
40 x 60	7.09939	11.04%	97.35%	
60 x 140	1.48721	2.31%	99.66%	
140 x 200	0.16829	0.26%	99.92%	
200 -	0.04578	0.07%	99.99%	
	64.32144	99.99%		

Sample: 88-22-01D

Mesh Size (Tyler)	Weight (Grams)	Percentage by weight	Cum. Percent by weight
+ 4	8.49442	24.30%	24.30%
4 x 10	3.48136	9.95%	34.25%
10 x 20	7.65952	21.91%	56.16%
20 x 40	10.70241	30.61%	86.77%
40 x 60	3.67203	10.50%	97,28%
60 x 140	0.85151	2.44%	99.71%
140 x 200	0.07249	0.21%	99.92%
200 -	0.02642	0.08%	100.00%
	34.96016	100%	

Sample: 88-22-04

Mesh Size (Tyler)	Weight (Grams)	Percentage by weight	Cum. Percent by weight
+10	9.87279	28.03%	28.03%
10 x 20	30.68991	43.29%	71.32%
20 x 40	15.69999	22.15%	93.47%
40 x 60	3.71055	5.23%	98.70%
60 x 140 .	0.85970	1.21%	99.91%
140 x 200	0.05143	0.07%	99.98%
200 -	0.01129	0.02%	100.00%
	70.89566	100%	

Table 3 Comparative Gold Values

<u>Location</u>	1945 Churn Drill <u>Results</u>	1988 Bulk/Confirmation <u>Sample Results</u>
Lower Reaches near old dragline working	Trace value over complete section	post-glacial gravel 30', trace inter-glacial gravels 15', 0.010 oz/b.c.y.
Lower Middle near old sawmill	005 oz/cu.yd/44' or .010 oz/cu.yd/22' on 45L-5	post-glacial gravel 20', trace inter-glacial gravels 20', .009015 oz/b.c.y.
Middle near Ventures Shaft	004 oz/cu.yd/42' or .008 oz/cu.yd/21' on 45L-6	post-glacial gravel 21', trace inter-glacial gravels 14', .008013 oz/b.c.y., .002031 oz/b.c.y.
Upper Middle between Mathers & Carruthers Creek	016 oz/cu.yd/43' or .091 oz/cu.yd/16'018 oz/cu.yd/45'010 oz/cu.yd/32'	no information
Upper Reaches near Bassford Creek	no information	post-glacial gravel: no data inter-glacial gravels 10'.024037 oz/b.c.y.

Historic mining records at the Ventures Shaft suggested that mining of high grade gravels above bedrock yielded a grade as high as .46 oz/b.c.y. These gold values were not encountered from the bulk sampling program, which attempted to intersect the old underground workings at this location. However, the confirmation samples from bulk sample location #03 did define a high degree of variance with resulting grades, ranging from .002 to .031 oz/b.c.y., thus suggesting a significant "nugget effect".

It appears from the area around the Ventures Shaft going upstream that gold values are increasing in grade, gold size is increasing in coarseness, there is a reduction in the number of fines, and the pay horizon is thinning.

Throughout this section only hard data regarding recoverable gold values has been discussed, however, there is a potential upside to the reported values. Within the bulk sampling program, CGR ran a number of confirmation samples from the same intervals that were bulk sampled. Though the results are not conclusive due to the small sample population and small sample size there is sufficient data to suggest a significant

gold loss occurred from the bulk sampling plant. The average of four comparable sample tests indicate that CGR's recovery is 44% more efficient than the bulk sampling plant. This statement can be explained by one or a combination of the following reasons:

1. CGR's mobile plant is comprised of more sophisticated gravity separation equipment than that of the bulk sampling plant.

2. CGR's samples were processed in above freezing conditions; whereas the bulk sampling program was conducted in sub-zero temperatures.

3. The bulk sampling plant only utilized the top sluice run.

4. The bulk sampling program included a significant degree of dilution caused by sluffage from the pit walls which was not considered into any grade calculations.

The main point to make is that all the grade calculations from the bulk sampling program are likely conservative.

7.0 ECONOMIC GEOLOGY

Based on the results to date possible reserves have been established; however, there is insufficient sample density to position reserves into the probable classification. The reserve base within Peters Creek is calculated from the old dragline workings upstream to Bassford Creek, a distance of 5525 meters (18,126 feet). It is assumed that the entire width of the Peters Creek channel can be mined and that the company will be permitted to divert the creek around areas of mining. For the purposes of calculating preliminary reserves, Peters Creek has been divided into five blocks which are consistent with those locations defined in Table 3. Table 4 summarizes the basic parameters for each block and assigns a degree of confidence rated 1 through 5 (5 being the highest) to the gold value assigned to each block.

The above reserve calculations are considered conservative due to the inconsistencies described in the interpretation of results. Previous engineering reports between 1922 and 1945 determined the following reserves for Peters Creek.

1922 G.E. Hogg: 3,200,000 cu.yd @ .025 oz/cu.yd = 80,000 oz North of Peters Creek to Campbell Creek.

1924 W.M. Thorne: 1,000,000 cu.yd @ .015 oz/cu.yd = 15,000 oz In the middle section of Peters Creek.

1945 G.A. Collins: 4,000,000 cu.yd @ .014 oz/cu.yd = 56,000 oz Over a 5 mile section.

Having been involved with the project on several different occasions it is probable that Mr. Thorne's analysis of reserves most likely reflects the potential for Peters Creek which in turn appears to be consistent with those represented in this report.

TABLE 4 - Preliminary Reserve Calculations

ion rve Block	Length							Grace* Gra	Recoverable old (oz fine)	Reserve Category 4 Degree Confidence (1-5)
ine nj. u.s.	1400	90	30	2 (v.) (24) ₁₂ 15	140,000 (182,000)	70,000	2.6:1	.010	700	Possible (4)
1250'	3475	100	20	20	257,000 (334,000)	257,000	1.3:1	.010	2570	Possible (4)
1200'	3675	100	21	14	236,000 (294,000)	•	1.5:1	.011	2101	Possible (4)
Line 5' 4:75'	6050	90	24	16	484,000 (629,000)	323,000	1.9:1	.014	4522	Possible (2)
1950' 1950'	3200	100	5	16	59,000 (76,000)	118,000	:.6:1	.020	2360	Possible (3)
= uc stream	eam			•	1,226,000 (1,515,000)	959,000	1.6:1	.013	12,253	

ge value in area

increase to commensate for slope of mine pit

There is good potential for expanding the referred reserve base by conducting exploration and obtaining favourable results in the following areas:

Upper reaches of Peters Creek, upstream of Bassford, 1)

Lower reaches of Bassford, Campbell and Carruthers Creeks, 2) 3)

Downstream of the old dragline workings.

8.0 **REFERENCES**

W.E. Cockfield

1933, "Summary Report Part A Willow River Map Area" Page 53A.

G.A. Collins

1951, "Peters Creek", Private Report

for Collins Pacific Ltd.

G.C. Hogg

1922, "Report on Peters Creek"

Private Report.

W.A. Johnston & W.L. Uglow

1926, "Geological Survey of Canada

Memoir 149" Pages 197-181.

Michael D. Philpot

June, 1988, "Peters Creak Placer

Project" Inhouse Report.

APPENDIX I
STATEMENT OF QUALIFICATION

STATEMENT OF QUALIFICATIONS

- I, MICHAEL D. PHILPOT, President of Canadian Gravity Recovery Inc., with a business address of Suite 920 625 Howe Street, Vancouver, British Columbia, DO HEREBY CERTIFY:
- 1. That I am a graduate from the University of British Columbia (1978) with a B.Sc. degree majoring in Geology. I am also a graduate from City University (1986) with an M.B.A. degree majoring in Business Administration;
- 2. That from 1978 to present, I have been actively engaged in various disciplines relating to the mining industry throughout western North America;
- 3. That I personally supervised the placer drilling program for Queenstake Resources in 1986 and have been engaged by Rich Coast Sulphur Ltd. to review all previous data and to coordinate and supervise the bulk sampling program which was conducted between September and December 1988;
- 4. That I have no interest in Rich Coast Sulphur Ltd. or in the subject property, nor do I expect to receive any such interest;
- That I am a Fellow of the Geological Association of Canada;
- 6. That I approve of this report or direct quotes from it being used for a Prospectus, Statement of Material Facts or in a News Release, provided that all exerpts are taken in total context of relevant passage.

Dated at Vancouver, British Columbia, this 30 day of January 1989.

Michael D. Philpot, B.Sc., M.B.A.